Notice of Allowability	Application No.	Applicant(s)	
	10/629,615	KLOSE ET AL.	
	Examiner	Art Unit	
	Dmitry Levitan	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *7/13/07*.

2. ☒ The allowed claim(s) is/are *1, 3, 5-11, 13, 15 and 17-21, renumbered as 1 ,2, 4 ,3 and 5-16*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☒ Other *Attachment A*.

Amendment, filed 7/13/07, has been entered.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Phong D. Nguyen on 8/01/07.

The application has been amended as follows:

Claims have been amended per Attachment A.

Note. Claims 1, 13 and 21 have been amended to avoid reading on Knight (US 2003/0163587). Claims 18 and 19 have been amended for clarity.

Allowable Subject Matter

2. Claims 1, 3, 5-11, 13, 15 and 17-21 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DL

DMITRY LEVITAN
PRIMARY EXAMINER

Dmitry Levitan
Primary Examiner
Art Unit 2616

Attachment A.

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A data communication adapter, comprising:

a first interface to connect with a scan tool;

a second interface to connect with a third interface that is on a vehicle;

at least one data line that relays data transmitted in a first communication protocol between the first and second interfaces;

a chipset in communication with the at least one data line, the chipset can convert the first communication protocol to a second communication protocol and vice versa;

a transceiver in communication with the chipset and the at least one data line, the transceiver receives and transmits data to and from the chipset;

a switch that is provided on the at least one data line to direct the data within the adapter, the switch being controlled by the chipset to open or close, wherein the chipset controls the switch to open or close depending if the communication protocol has to be converted, wherein when the switch is closed, the communication protocol is communicated on the at least one data line between the scan tool and the interface on the vehicle, and when the switch is open the chipset converts the first communication protocol to the second communication protocol and vice versa; and

a regulator to change from a first voltage of a battery to a second voltage, wherein the chipset comprises:

a J1850 communication controller;

a CAN controller; and

a microprocessor, wherein the communication controller, the CAN controller and the microprocessor are in communication with each other.

2. (Cancelled)

3. (Original) The adapter of claim 1, wherein the first communication protocol is J1850 and the second communication protocol is CAN.

4. (Cancelled)

5. (Previously Amended) The adapter of claim 1, wherein the microprocessor includes a memory device selected from a group consisting of an EEPROM, a flash memory, and a RAM.

6. (Previously Amended) The adapter of claim 3, wherein communication protocols that are not converted can be communicated directly between scan tool and the third interface on the vehicle without interference from the chipset.

7. (Previously Amended) The adapter of claim 1, wherein the chipset monitors the at least one data to determine whether J1850 or CAN communication is requested by the scan tool and directs the data to the appropriate portion of the adapter by opening or closing the switch.

8. (Previously Amended) The adapter of claim 1, wherein the communication protocol is selected from a group consisting of J1850, ISO 9141, ISO 14230, CAN, ISO 11898, and ISO 15765.

9. (Previously Amended) A method for data communication, comprising the step of:

providing a communication adapter that interfaces with a scan tool and an interface on a vehicle;

monitoring at least one communication line for a communication protocol that contains data;

directing where the communication protocol will go in the adapter by a chipset that controls a switch located on the at least one communication line; and

converting a first communication protocol to a second communication protocol and vice versa with the chipset, wherein the chipset controls the switch to open or close depending if the communication protocol has to be converted, wherein when the switch is closed, the communication protocol is communicated on the at least one data line between the scan tool and the interface on the vehicle, and when the switch is open the chipset converts the first communication protocol to the second communication protocol and vice versa.

10. (Original) The method of claim 9, wherein the communication adapter is a CAN adapter.

11. (Previously Amended) The method of claim 9, wherein the communication protocol is selected from a group consisting of J1850, ISO 9141, ISO 14230, CAN, ISO 11898, and ISO 15765.

12. (Cancelled)

13. (Currently Amended) A communication adapter system, comprising:

first means for interfacing with a scan tool;

second means for interfacing to connect with a third means for interfacing that is located on a vehicle;

means for relaying data by a communication protocol between the first and second means for interfacing;

means for controlling the communication of the data that is in communication with the means for relaying data, the means for controlling converts a first communication protocol to a second communication protocol and vice versa;

means for transceiving that is in communication with the means for controlling, and receives and transmits data to and from the means for controlling;

means for switching to direct the data that is controlled by the means for controlling, wherein the means for controlling controls the means for switching to open or close depending if the communication protocol has to be converted, wherein when the means for switching is closed, the communication protocol is communicated on the means for relaying data between the scan tool and the third means for interfacing on the vehicle, and when the means for switching is open the means for controlling converts the first communication protocol to the second communication protocol and vice versa; and

means to regulate a voltage from one voltage of a power source means to another voltage, wherein the means for controlling is a chipset that comprises:

a communication controller;

a CAN controller; and

a microprocessor, wherein the communication controller, the CAN controller and the microprocessor are in communication with each other.

14. (Cancelled)

15. (Original) The adapter system of claim 13, wherein the means for relaying data allows data communication to occur between the first and the second means for interfacing.

16. (Cancelled)

17. (Previously Amended) The adapter system of claim 13, wherein the microprocessor includes a memory device selected from a group consisting of an EEPROM, a flash memory, and a RAM.

18. (Currently Amended) The adapter system of claim 13, wherein the means for controlling monitors and controls the means for switching ~~switch~~ to open so that communication between the first and second means for interfacing is directed towards the means for controlling.

19. (Currently Amended) The adapter system of claim 13, wherein the means for controlling monitors and controls the means for switching ~~switch~~ to close so that communication between the first means and third means for interfacing can occur ~~without interference from the chipset~~.

20. (Previously Amended) The adapter system of claim 13, wherein the communication protocol is selected from a group consisting of J1850, ISO 9141, ISO 14230, CAN, ISO 11898, and ISO 15765.

21. (Currently Amended) A data communication adapter, comprising:

a first interface to connect with a scan tool;

a second interface to connect with a third interface that is on a vehicle;

at least one data line that relays data transmitted in a communication protocol between the first and second interfaces;

a chipset in communication with the at least one data line, the chipset can convert a first communication protocol to a second communication protocol and vice versa;

a transceiver in communication with the chipset and the at least one data line, the transceiver receives and transmits data to and from the chipset;

a switch that is provided on the at least one data line to direct the data within the adapter, the switch being controlled by the chipset to open or close, wherein the chipset controls the switch to open or close depending if the communication protocol has to be converted, wherein when the switch is closed, the communication protocol is communicated on the at least one data line between the scan tool and the interface on the vehicle, and when the switch is open the chipset converts the first communication protocol to the second communication protocol and vice versa; and

a regulator to change from a first voltage of a battery to a second voltage, wherein the chipset comprises:

a J1850 communication controller;

a CAN controller; and

a microprocessor, wherein the communication controller, the CAN controller and the microprocessor are in communication with each other.